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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,590	03/11/2004	Bing Wang	DA-005-US-02	6364

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EXAMINER
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ROSSI, JESSICA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/798,590

Applicant(s)

WANG ET AL.

Examiner

Jessica L. Rossi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/31/05, Election.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 23-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 31-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/7/04, 9/7/04, 10/18/04</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I, claims 1-22 and 31-35 in the reply filed on 10/31/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Objections***

2. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

It is unclear as to how claim 13 further limits claim 12, since claim 12 already establishes the presence of an amorphous poly- $\alpha$ -olefin in the sealant composition.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 17 and 34-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 17, it is unclear what Applicant is intending to set forth. Is this claim intended to be a product by process claim or a process claim? It appears Applicant is attempting to set forth a process claim. If this is the case, then it is suggested to amend the claim to state,

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“The process of claim 1, wherein the insulating glass assembly is an insulating glass unit.”

However, such as amendment would raise another 112 2<sup>nd</sup> paragraph issue because it would then be unclear as to how an insulating glass unit further limits claim 1 since it appears that an insulating glass unit and an insulating glass assembly are the same thing. Applicant is asked to clarify.

Regarding claims 34-35, they recite the limitation "the first bond line" and the "the second bond line". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3, 6, 10-11 and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Hornung et al. (US 2004/0074588).

With respect to claim 1, Hornung teaches all the limitations (Figure 3; section [0034, 0036]) – it being noted that the reference does not teach the application of heat during the pressing step; therefore, the skilled artisan would readily appreciate that Hornung, like the present invention, teaches pressing at ambient temperature, wherein such a temperature would fall within Applicant’s claimed range given the fact that room/ambient temperature is about 25°C.

Regarding claims 3, 6 and 10, the reference teaches such (Figure 3; section [0036]).

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Regarding claim 11, the reference teaches such (sections [0037, 0047]).

Regarding claims 16-17, the reference teaches such (sections [0002, 0028]).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornung et al. as applied to claim 1 above and further in view of the Admitted Prior Art in the present specification.

Regarding claims 2 and 4, one reading Hornung would have appreciated that the reference is not concerned with a particular pressure so long as the glazing panes are not damaged (section [0036]). Therefore, selection of a pressure would have been within purview of the skilled artisan; however it would have been obvious to use a pressure that falls within the claimed range because such is known in the art, as taught by the Admitted Prior Art (p. 2, lines 25-27).

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hornung et al. as applied to claim 1 above and further in view of Briese et al. (US 2002/0069823).

Regarding claim 5, Hornung teaches automatically dispensing the sealant adhesive onto both sides of the spacer, but is silent as to doing it simultaneously (sections [0037, 0048]). It would have been obvious to dispense simultaneously because such is known in the art of

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applying sealant to a spacer, as taught by Briese (Figures 1 and 2A; section [0009]), where this expedites the manufacturing process.

10. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornung et al. as applied to claim 1 above, and further in view of Hornung (US 6679013).

Regarding claims 14-15, Hornung '588 is not concerned with a material for the spacer. Therefore, it would have been obvious to use metal or plastic because both materials are well known and conventional materials for making spacer/sash frames (column 5, lines 56-60).

11. Claims 18, 20-22 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornung et al. as applied to claim 1 above.

Regarding claim 18, Hornung teaches installing the insulated glass unit in a building or the like (section [0028]). The skilled artisan would have appreciated that such would require installing the glass unit into a frame of the building and therefore would have been motivated to do this by applying sealant to the frame and applying pressure because such is well known and conventional in the art.

Regarding claims 20-22, such performance requirements are required for all commercial insulating glass assemblies to pass inspection and therefore it would have been obvious to make the assembly of Hornung such that it passes such requirements.

Regarding claims 31-33, all the limitations were addressed above with respect to claims 1, 3 and 20-22.

12. Claims 7-9, 12-13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornung et al. as applied to claims 1 and 18 above and further in view of Wey et al. (US 5994474, provided in IDS).

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Regarding claims 12-13, one reading Hornung as a whole would have readily appreciated that the reference is not concerned and/or limited to a particular type of sealant/adhesive; therefore selection of such would have been within purview of the skilled artisan. However, it would have been obvious to use an adhesive/sealant comprising the components claimed by Applicant because such is a known moisture-curing hot melt adhesive/sealant in the construction and automotive industry for bonding glass to plastic or metal, as taught by Wey (abstract; column 1, lines 10-13; column 2, lines 20-35; column 3, lines 22-55; column 4, lines 16-30 and 36). It is noted that Wey teaches the sealant including all of the components being claimed by Applicant, except the polyisobutylene. However, one skilled in the art would have appreciated that polyisobutylene is a well known tackifier for sealant compositions and therefore since Wey is not limited to a particular tackifier (column 3, lines 43-48) it would have been obvious to use polyisobutylene.

Regarding claims 7-8, Wey teaches applying the sealant in the form of a melt at a temperature that falls within Applicant's claimed range (column 3, line 60 – column 4, line 2).

Regarding claim 9, such would have been within purview of the skilled artisan depending on the characteristics of the sealant.

Regarding claim 19, all the limitations were addressed above.

13. Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hornung et al. as applied to claim 31 above, and further in view of the Admitted Prior Art.

Regarding claim 34, one reading Hornung would have appreciated that the reference is not concerned with a particular pressure so long as the glazing panes are not damaged (section [0036]). Therefore, selection of a pressure would have been within purview of the skilled

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artisan; however it would have been obvious to use a pressure that falls within the claimed range because such is known in the art, as taught by the Admitted Prior Art (p. 2, lines 25-27).

Regarding claim 35, Hornung teaches such (section [0034]).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JESSICA ROSSI  
PRIMARY EXAMINER**

